Grand Street Designing for Safety Improvements: Shore Line to Clement

Community Workshop (Virtual)

June 13, 2023

CITY OF ALAMEDA

Agenda

6:00 pm	**Welcome**
6:05 pm	**Background** - Jennifer Ott, City Manager (recorded)
6:10 pm	**Why Grand St is important** - Andrew Thomas, Planning, Building & Transportation Director Why Grand St is important
6:15 pm	**Alternatives studied & staff recommendations** – Rochelle Wheeler, Senior Transportation Coordinator
6:35 pm	**Your comments & questions**
7:30 pm	**Adjourn**

Background

- **<u>November 2022</u> - Council approved street designs from Shore Line to Encinal as part of a re-paving project**
  - Constrained by curb-to-curb dimension
  - Prior to Active Transportation Plan approval
  - Staff committed to review entire corridor
- **<u>January 2023</u> - Staff retained new transportation consultant to review entire corridor**
  - Direction to explore alternatives without budget and curb-to-curb constraints
  - Paid special attention to citywide importance of unique north-south connection
- **<u>January – June 2023</u> - Staff and consultant study corridor alternatives and gather community input**
  - Staff considering recommendation of alternative design

Corridor Study Goals - Updated

- **Improve safety for all consistent with recently approved Active Transportation Plan and other policy goals**
  - People walking, bicycling and driving, and youth, seniors and those with disabilities
- **Design for the full length of Grand Street corridor from Shore Line to Clement**
  - Conditions vary over corridor's 20 blocks
- **Consider the full width of the public right-of-way, including sidewalks**
  - Not just the street from curb-to-curb
- **Consider costs and funding**
  - Don't lose the $827,000 in grant funds due to delays and balance costs & benefits
- **Consider phased construction over time**
  - Deliver project in phases (similar to Cross Alameda Trail implementation)
- **Recommendations to City Council on one or more phases in July 2023**
  - Important to move quickly to address safety concerns

Why is Grand Street important?


Cross Alameda Trail

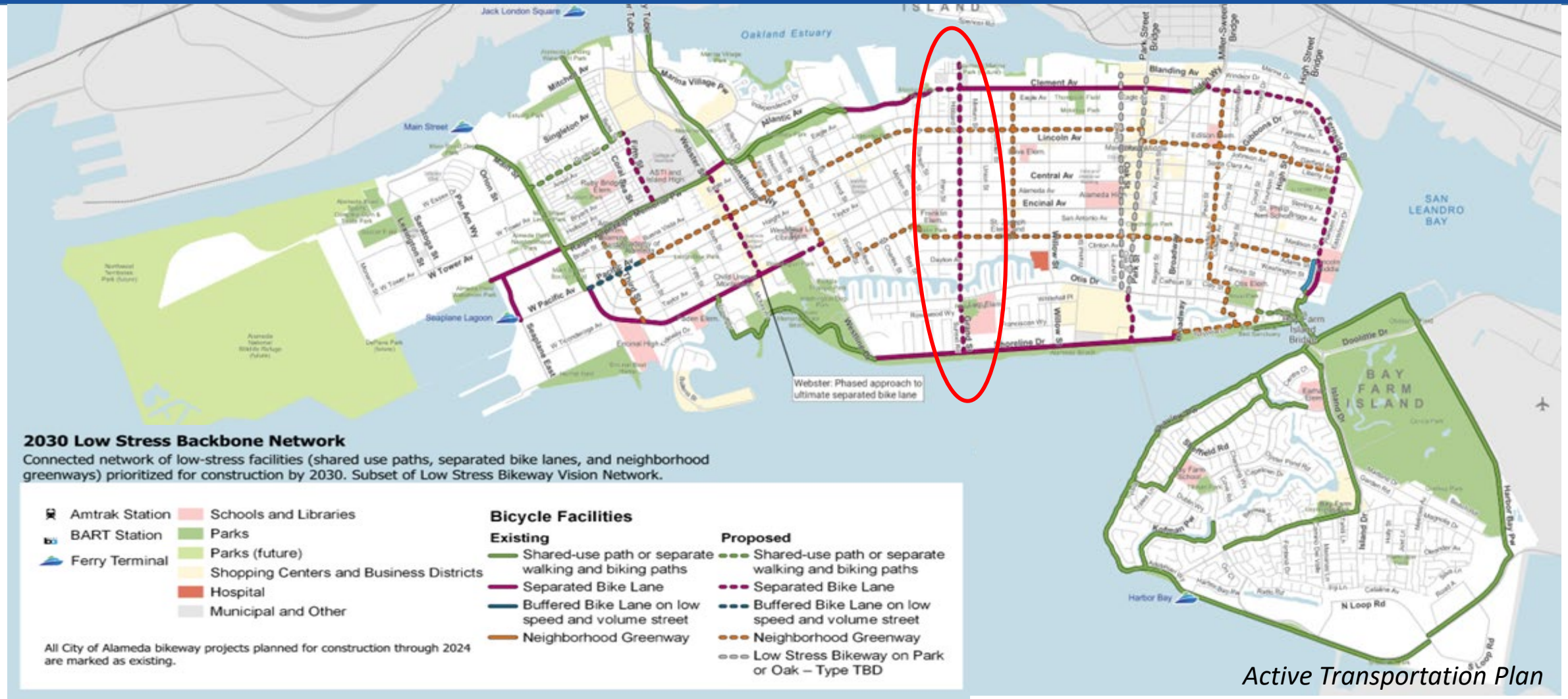

Shore Line Dr

Grand Street

A critical connector:

- Northern to southern waterfront
- Cross Alameda Trail to Shore Line Dr, two major east-west, low stress bikeways
- One of only two north/south streets between Eighth St and Park St

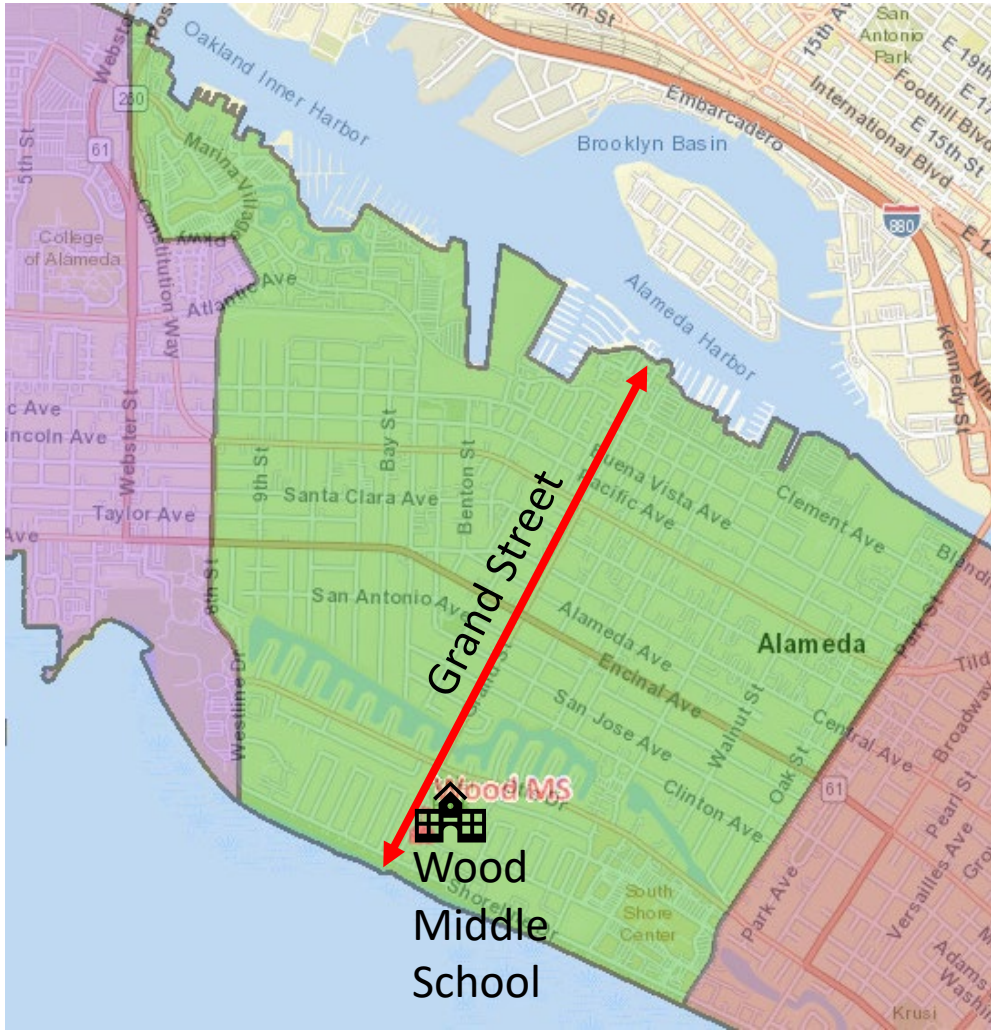
Key Link in Citywide Low-Stress Bicycle Network



Active Transportation Plan

An Important School Access Route

- Grand St travels through the center of Wood Middle School enrollment area (*shown in green*)



Map of AUSD middle school enrollment areas

A High Injury Corridor

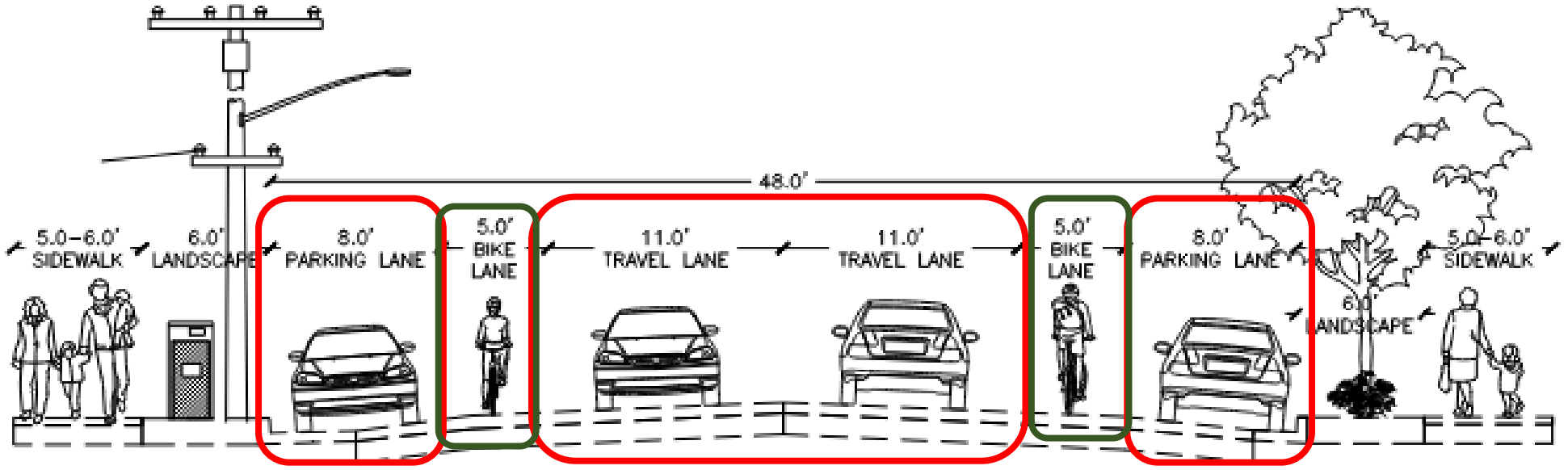
- **City of Alameda,** *Vision Zero Action Plan*
- **Countywide**, *Alameda CTC Countywide Active Transportation Plan*
- **Region**, *MTC regional High Injury Network*

Collisions on Grand St disproportionately affect youth and elders. 2013 -2022 data:

- 39% of bicyclists injured in collisions were youth under age 18
- 86% of pedestrians injured or killed in collisions were elders age 65+

Bicycle High Injury Corridors Map, Vision Zero Action Plan

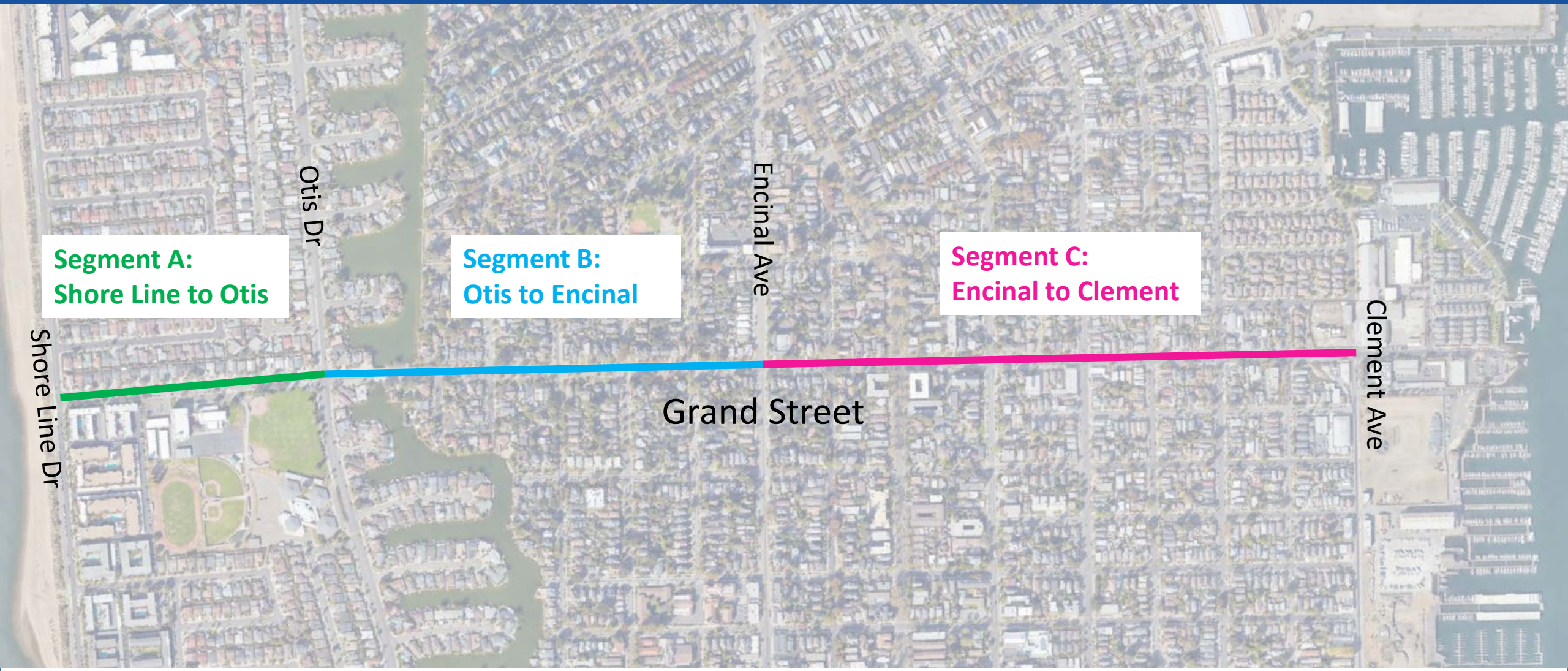
Grand Street Today



TYPICAL SECTION
EXISTING CONDITIONS

- 2 Travel lanes (11’)
- 2 Parking lanes (8’)
- 2 Sidewalks (5-6’)
- 2 Standard unprotected bike lanes (5’)
- 2 Landscaping areas (6’)
- Street is 48’ wide (curb to curb)

Grand St Improvements: Three Segments



Corridor Study Results:
4 Alternatives to Consider

Council-Approved Design (November 2022):

- *Segment A: Shoreline to Otis:*
  - 2-way bikeway on east side next to Wood School
- *Segment B: Otis to Encinal:*
  - 1-way parking/bollard-protected bikeways on each side of street
- *Segment C: Encinal to Clement:* TBD with further study

Alternative #1: 2-way bikeway for whole corridor (Shoreline to Clement)

Alternative #2: 1-way raised bikeways on each side of street (Otis to Clement)

Alternative #3: Enhanced raised 1-way bikeway (Otis to Clement)

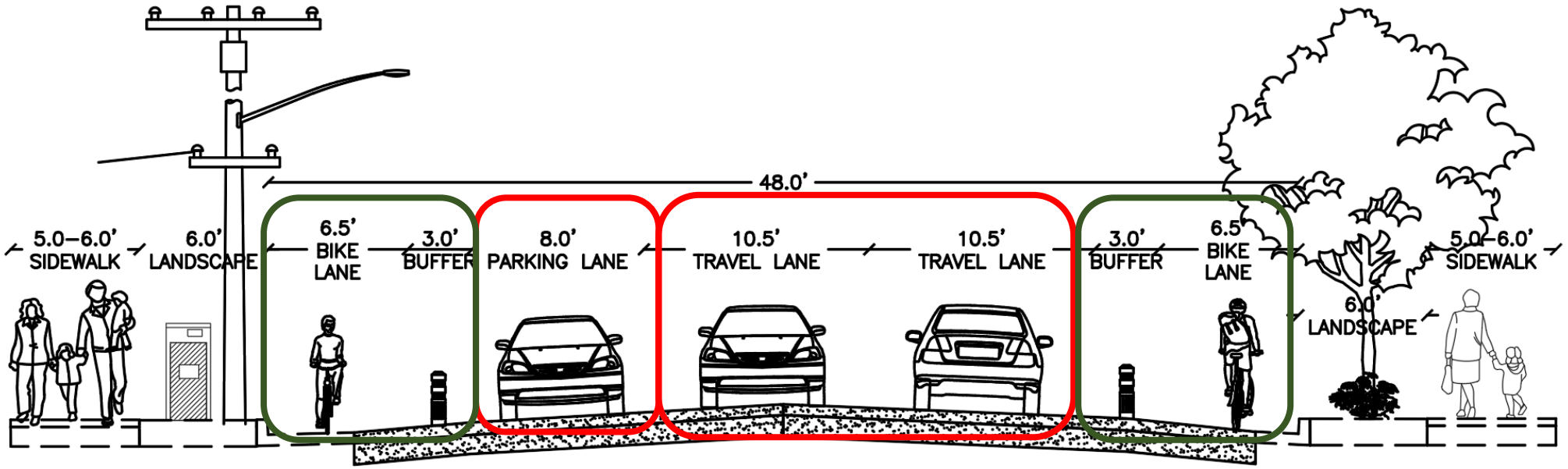
Alternatives are similar in many ways

	Council Approved Design	Alternative 1	Alternative 2	Alternative 3
2 travel lanes	✓	✓	✓	✓
Pedestrian improvements	✓	✓	✓	✓
Low stress, separated bike lanes	✓	✓	✓	✓
Bikeway raised to sidewalk level		✓	✓	✓
Auto parking on both sides of street, at the curbs		✓	✓	✓
Curb to curb street width narrowed		✓	✓	✓

Council-Approved design for Segment A: Shore Line to Otis 2-way bikeway

- Parking/bollard-protected, on east side of street, next to Wood School
- Fully funded using $827,000 in grant funds (+ local funds)
- Can be ready for construction in 2024
- No alternatives developed for this segment

Council-Approved design for Segment B: Otis to Encinal 1-way bikeways

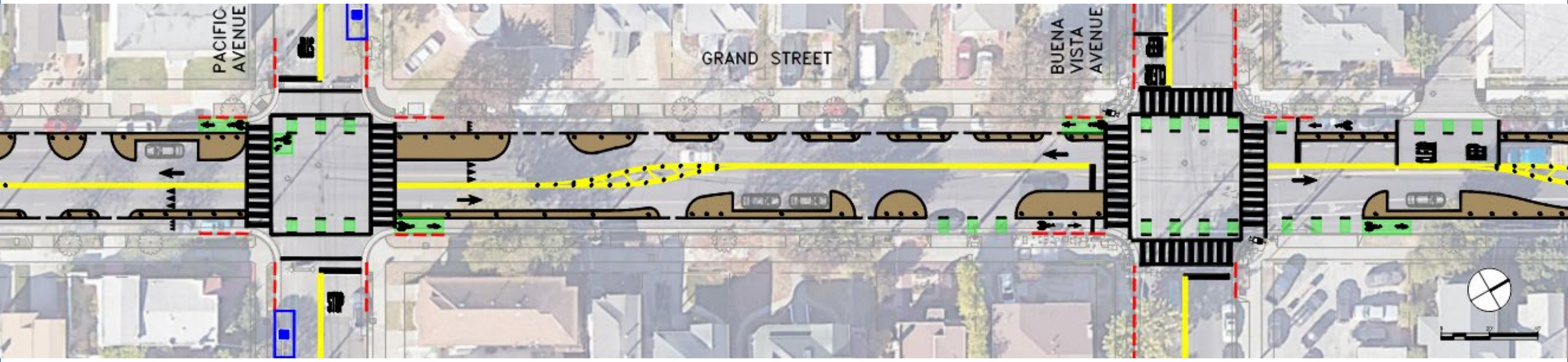


TYPICAL SECTION

- Bikeways on both sides of street, protected by parked cars or bollards
- Parking for half blocks only, on each side of street ("chicane")
- Can be ready for construction in 2024

Council-Approved design for Segment B: Otis to Encinal 1-way bikeways

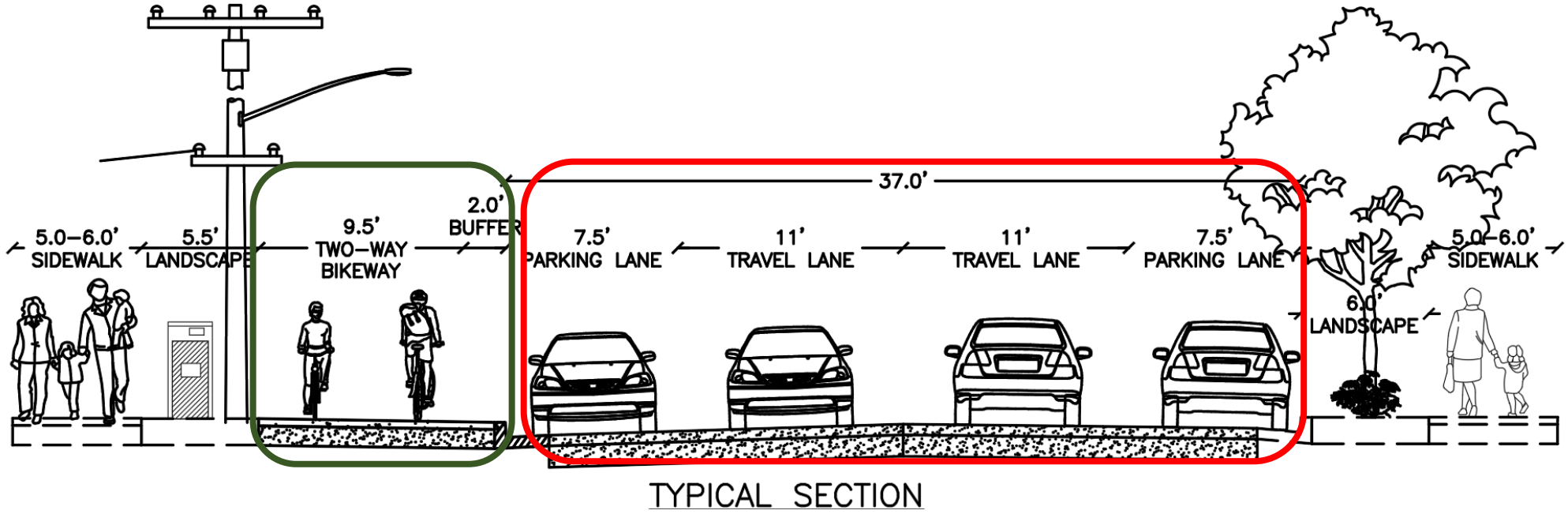
Council-Approved design *extended North*
Segment C: Encinal to Clement
1-way bikeways



- More frequent driveways from Encinal to Clement, so more parking impacts
- Up to 75% parking loss (as compared to Otis to Encinal at 60%)
- If parking is on one side of street only, then less parking loss (50%)

Council-Approved design *extended North*
Segment C: Encinal to Clement
1-way bikeways

Alternative #1: Raised 2-way Bikeway



TYPICAL SECTION

- Moves curb 11 ft. to create 2-way raised bikeway on east side of Grand
- Street width curb to curb is reduced from 48’ to 37’ wide
- Parking on both sides, at curb

Alternative #1: Raised 2-way Bikeway

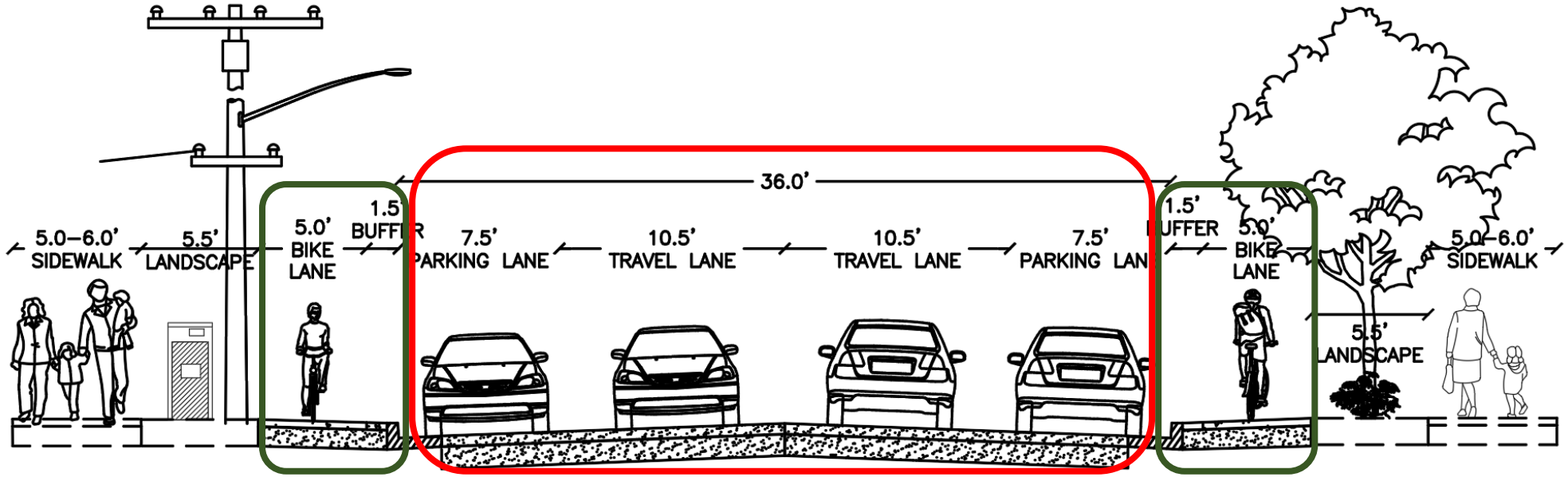
Pros

- More separation between bicyclists and cars
- Less striping and plastic bollards
- Parking at curbs
- Less parking loss (5% to 15% total reduction)

Cons

- Intersections more complicated and costly than 1-way bikeways
- More expensive than Council-Approved design

Alternative #2: Raised 1-way Bikeways



TYPICAL SECTION

- Moves curbs 6’ on both sides of street, for 1-way raised bikeway on each side of street
- Street is reduced from 48’ to 36’ wide
- Parking on both sides, at curbs

Alternative #2: Raised 1-way Bikeways

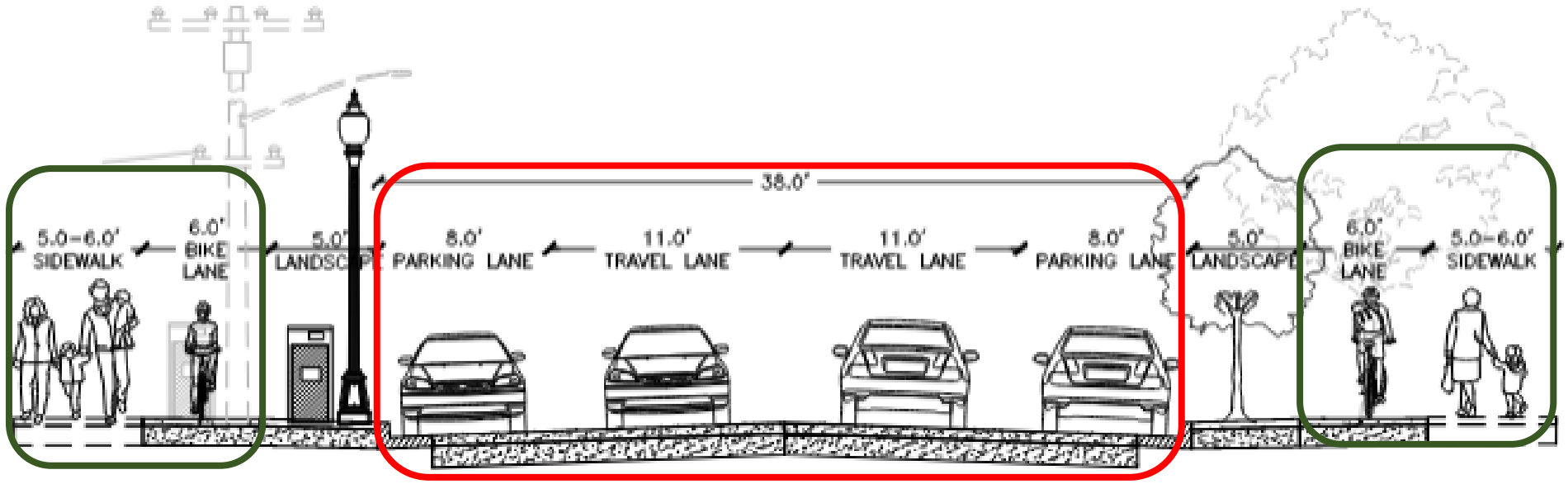
Pros

- More separation between bicyclists and cars
- Intersection/driveway crossings more intuitive than 2-way bikeway
- Less striping and plastic bollards
- Parking at curbs
- Less parking loss (10-30%) than Council-Approved, but more than Alternative #1

Cons

- Narrowest bikeways of all Alternatives
- Narrowest curb to curb width (for cars)
- More expensive than Council-Approved and Alternative #1

Alternative #3:
Enhanced Raised 1-way Bikeways



- Moves curb 5’ on each side of street (similar to Alternative #2)
- Moves all utilities and replaces mature trees to allow for 1-way bikeways next to sidewalks
- Parking on both sides, at curbs
- Street is reduced from 48’ to 38’ wide

Alternative #3: Enhanced Raised 1-way Bikeways

Pros

- Most separation between bicyclists and cars
- Intersection/driveway crossings more intuitive than 2-way bikeway
- Parking at curbs
- Less parking loss (10-30%) than Council-Approved, but more than Alternative #1

Cons

- Most expensive of all alternatives
- Takes longest to build
- Removes all mature trees, and replaces with younger, smaller trees

Grand Street with mature trees

Cost Comparison

Design	Cost Estimate	*Increase over Council-Approved design*
Council-Approved Design		
Segment A: Shore Line to Otis - Fully funded with grant	*$ 1,500,000*	
Segment B: Otis to Encinal	$ 2,970,000	
Segment C: Encinal to Clement	$ 4,080,000	
Total (Segments B+C)	**$ 7,050,000**	
Alternative #1: Raised 2-way bikeway		
Segment B: Otis to Encinal	$ 5,610,000	*$ 2,640,000*
Segment C: Encinal to Clement	$ 7,720,000	*$ 3,640,000*
Total (Segments B+C)	**$ 13,330,000**	*$ 6,280,000*
Alternative #2: Raised 1-way bikeways		
Segment B: Otis to Encinal	$ 6,880,000	*$ 3,910,000*
Segment C: Encinal to Clement	$ 9,690,000	*$ 5,610,000*
Total (Segments B+C)	**$ 16,570,000**	*$ 9,520,000*
Alternative #3: Enhanced raised 1-way bikeways		
Total (Segments B+C)	**$ 24,370,000**	*$17,320,000*

Costs estimates are total costs: construction, design, construction management, escalation, and contingencies.

Parking Comparison

Design	Percent of Existing Parking Removed
Council-Approved	60-70%
Alternative #1: Raised 2-way bikeway	5-15%
Alternative #2: Raised 1-way bikeways	10-30%
Alternative #3: Enhanced raised 1-way bikeways	10-30%

Ranges are estimates, and are primarily based on amount of red curb added at driveways, to be determined based on site conditions, best practices and safety.

Implementation Timing Comparison

Design	Estimated Year to Begin Construction
Council-Approved	Segments A and B in 2024 Segment C in 2026 (grant funds needed)
Alternative #1: Raised 2-way bikeway	Segment A in 2024 **Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)** Segment C by 2030 (grant funds needed)
Alternative #2: Raised 1-way bikeways	Segment A in 2024 **Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)** Segment C by 2030 (grant funds needed)
Alternative #3: Enhanced raised 1-way bikeways	Segment A in 2024 **Segment B in 2028-29 (with grant funds)** Segment C by 2030 (grant funds needed)

Timing based on estimates of availability of, and success in securing, grant funds.

Summary Comparison

Design	Overview
Council-Approved	• Parking/bollard-protected bikeways • Least expensive • Quickest to build of all three segments • Most parking loss
Alternative #1: Raised 2-way bikeway	• More separation between bicyclists and cars; 2-way bikeways less intuitive for all • Second least expensive • Second fastest to build • Least parking loss
Alternative #2: Raised 1-way bikeways	• More separation between bicyclists and cars, but narrowest bikeways • Third least expensive • Also second fastest to build • More parking loss than Alternative #1, but less than Council-Approved.
Alternative #3: Enhanced raised 1-way bikeways	• Most separation between bicyclists and cars • Most expensive • Takes longest to build • Most disruptive to neighborhood character • Similar parking loss to Alternative #2

Staff Recommendations

- **Proceed with Council-Approved design for Segment A: Shore Line to Otis.** Construct in 2024.
- **Pursue Alternative #1 instead of Council-Approved design, to create a continuous 2-way bikeway for the full corridor.**

Next Steps

- **What your comments and questions?**
- Comment form on project web page
- Participate in future meetings:
  - Transportation Commission Meeting – June 21
    - Email comments to Commissioners: tc@alamedaca.gov
  - City Council Meeting – July 18
- Everything posted to project webpage: **www.alamedaca.gov/grand**